



2024 Crop Insurance Prices and Decision Making

Center for Agricultural Profitability
Department of Agricultural Economics

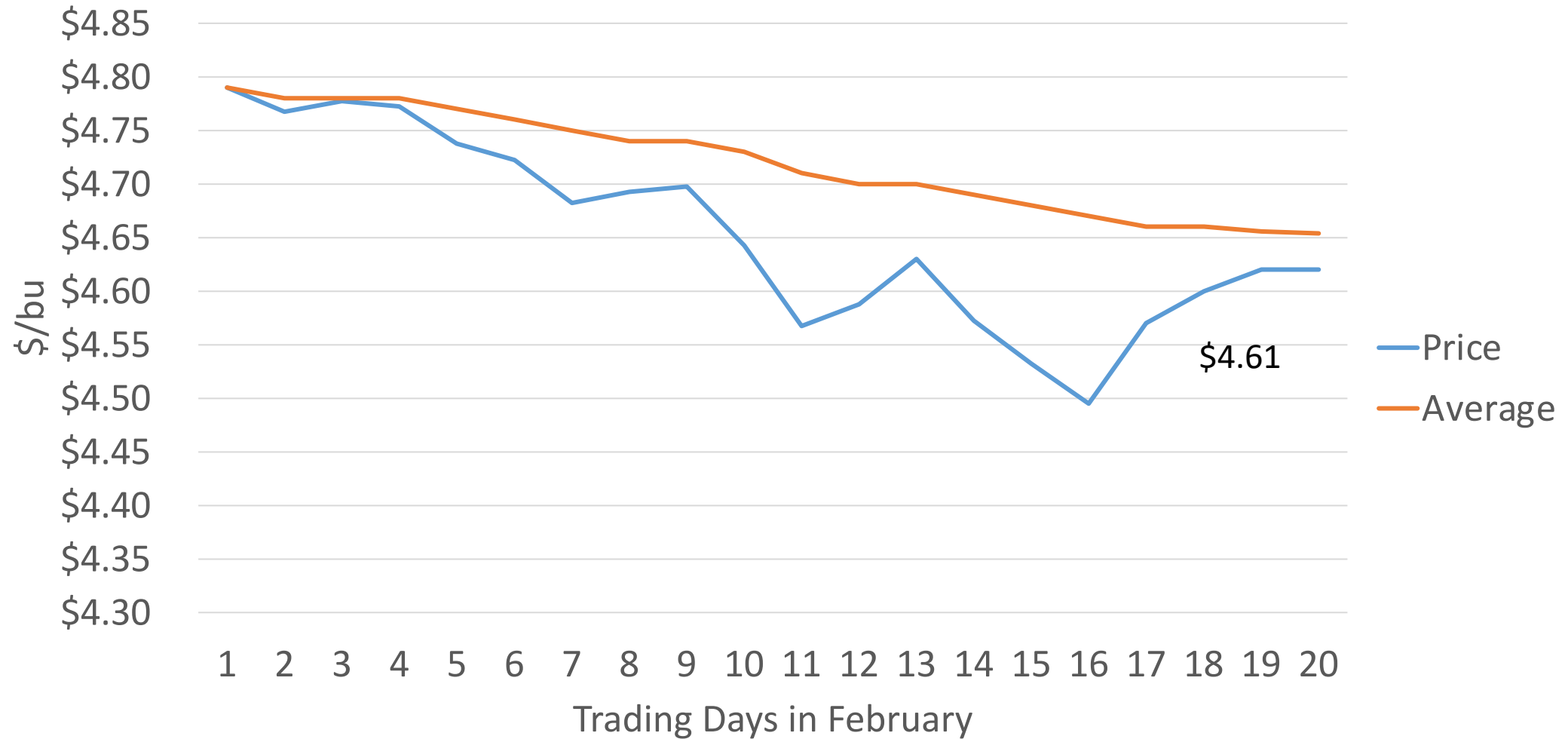
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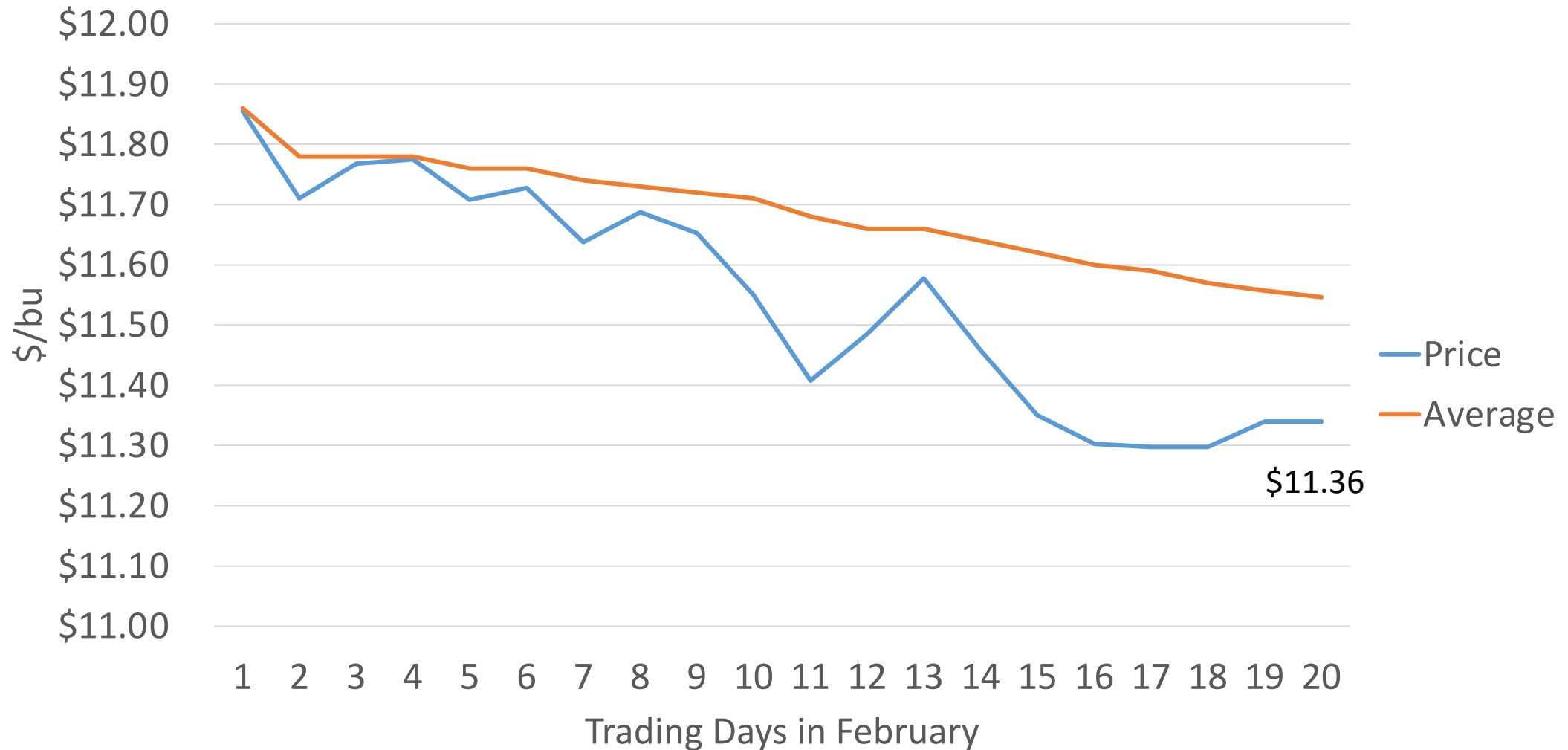
2024 Corn and Soybean Crop Insurance Projected Prices

- Corn – estimated at \$4.66/bu and .19 volatility factor



2024 Corn and Soybean Crop Insurance Projected Prices

- Soybean – estimated at \$11.56/bu and .15 volatility factor



Decision Making

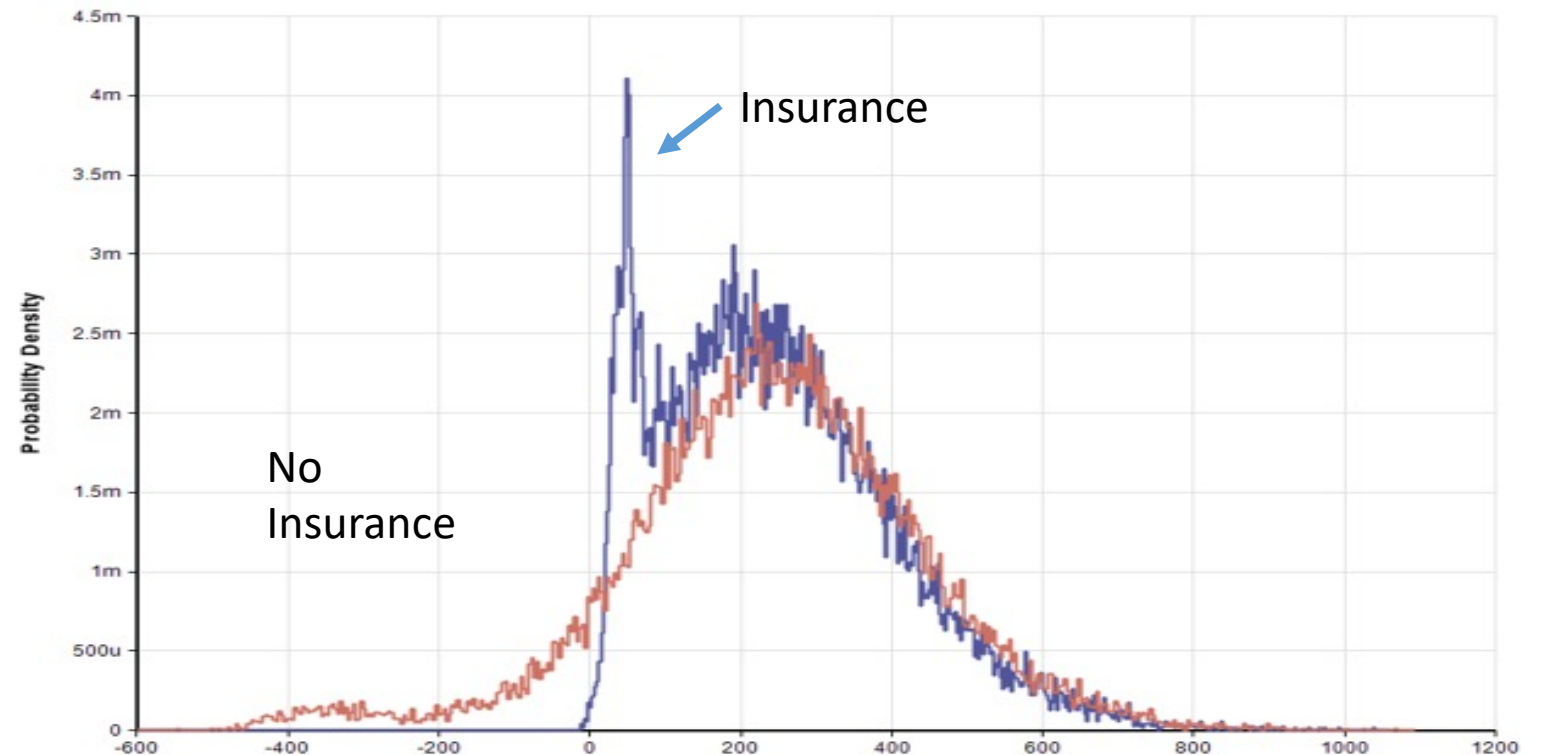
- Risk is personal
 - Use your information
 - Cost of production
 - Insurance guarantee
 - Your own contract
 - Coverage level: High/low deductible
 - Insurance type: Revenue Protection or Yield Protection or ?
 - Unit structure: enterprise, optional, basic
- Be aware of what is happening around you
 - Derecho
- Risk is rare and financially devastating

Decision Making

- Look forward and own your decisions
 - Trade the market you are in, not the one you want
 - Knowing you do not know what will happen this fall – rather, you can manage the **distribution of outcomes**
- Agriculture will continue to require more and more financial knowledge to operate
 - Keep learning
- Thought: Cost of producing lentils: \$250/acre (seed, fert, chem, land rent, estimated repairs, insurance, etc...)
 - Crop Insurance revenue guarantee less premium: \$360/acre
 - Key: Market economics matter – premium price for lentils. Should get lots of production to push prices down. I would not want to be going in this crop without insurance! Fall prices likely to be lower

Philosophy of Insurance

- Integrate into your operation
 - Insurance re-arranges financial outcomes
- Strategically use insurance to improve farm financial performance
- Must know
 - How insurance works
 - How markets work
 - Your costs



What is the most successful risk management strategy?

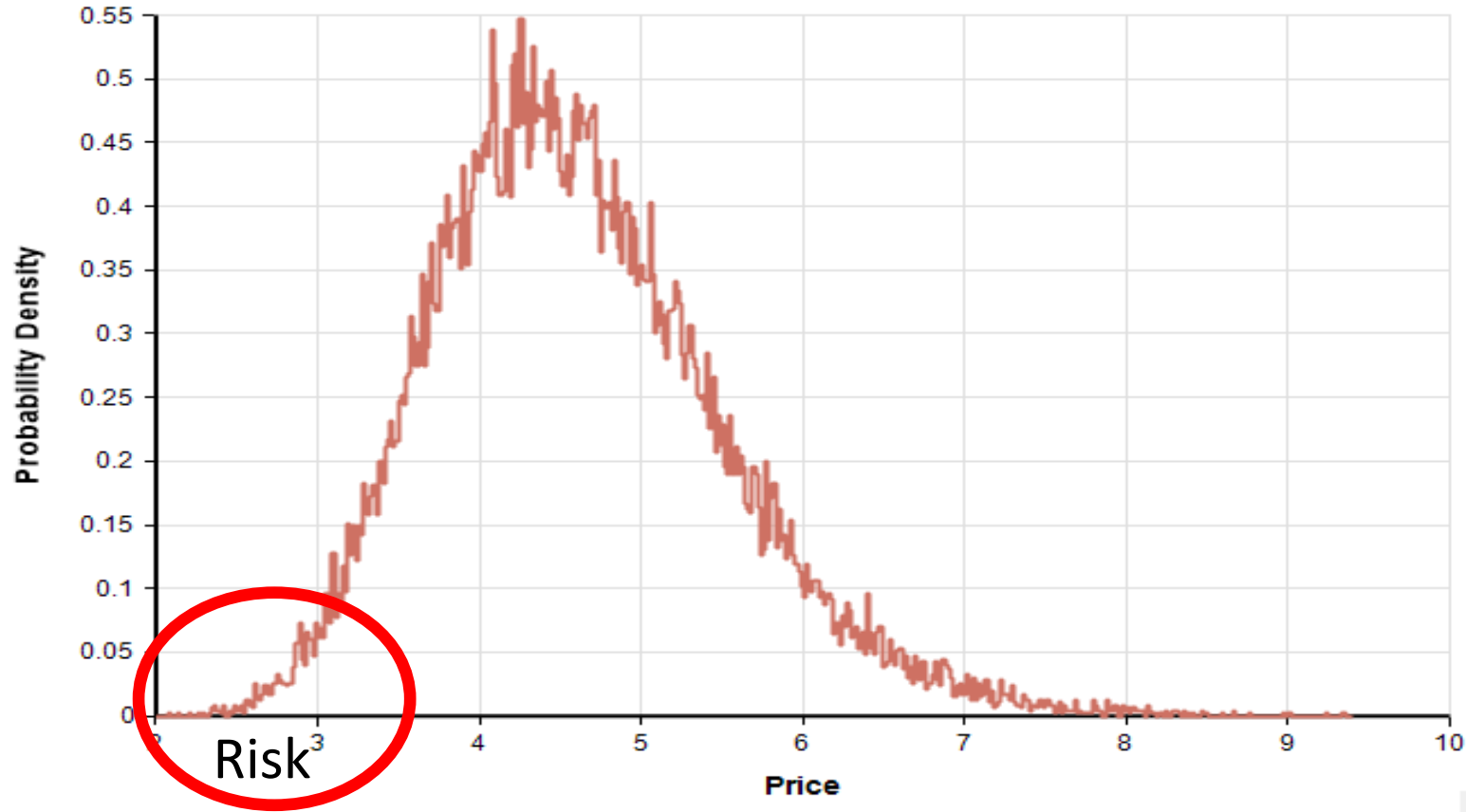
Those that survive **TIME**

Time is not 'last year'

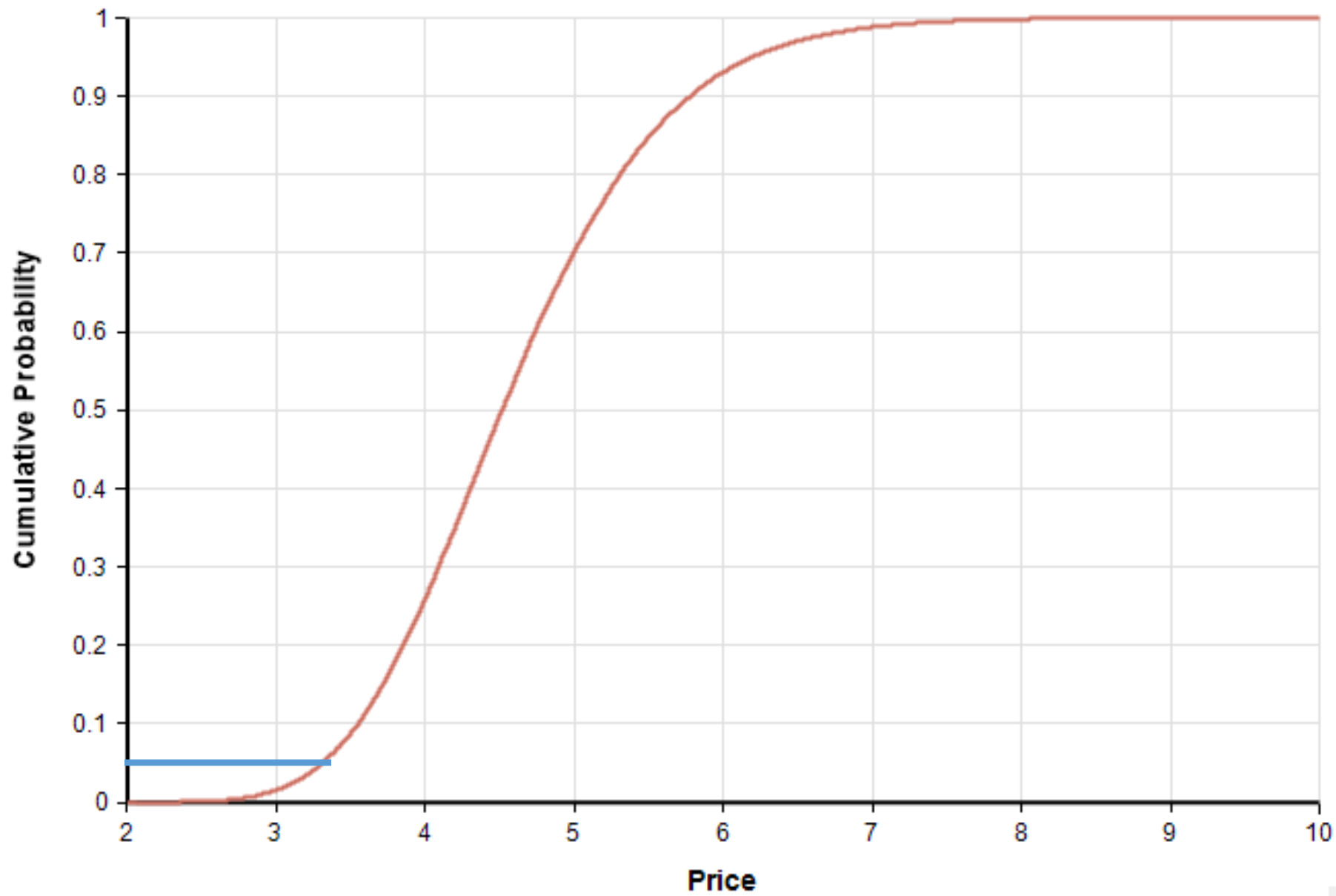
- Rare, financially devastating events (droughts, wind hail, etc...) expose complexity in decision making
- One bad event can put you on a path to ruin

What do these insurance prices mean?

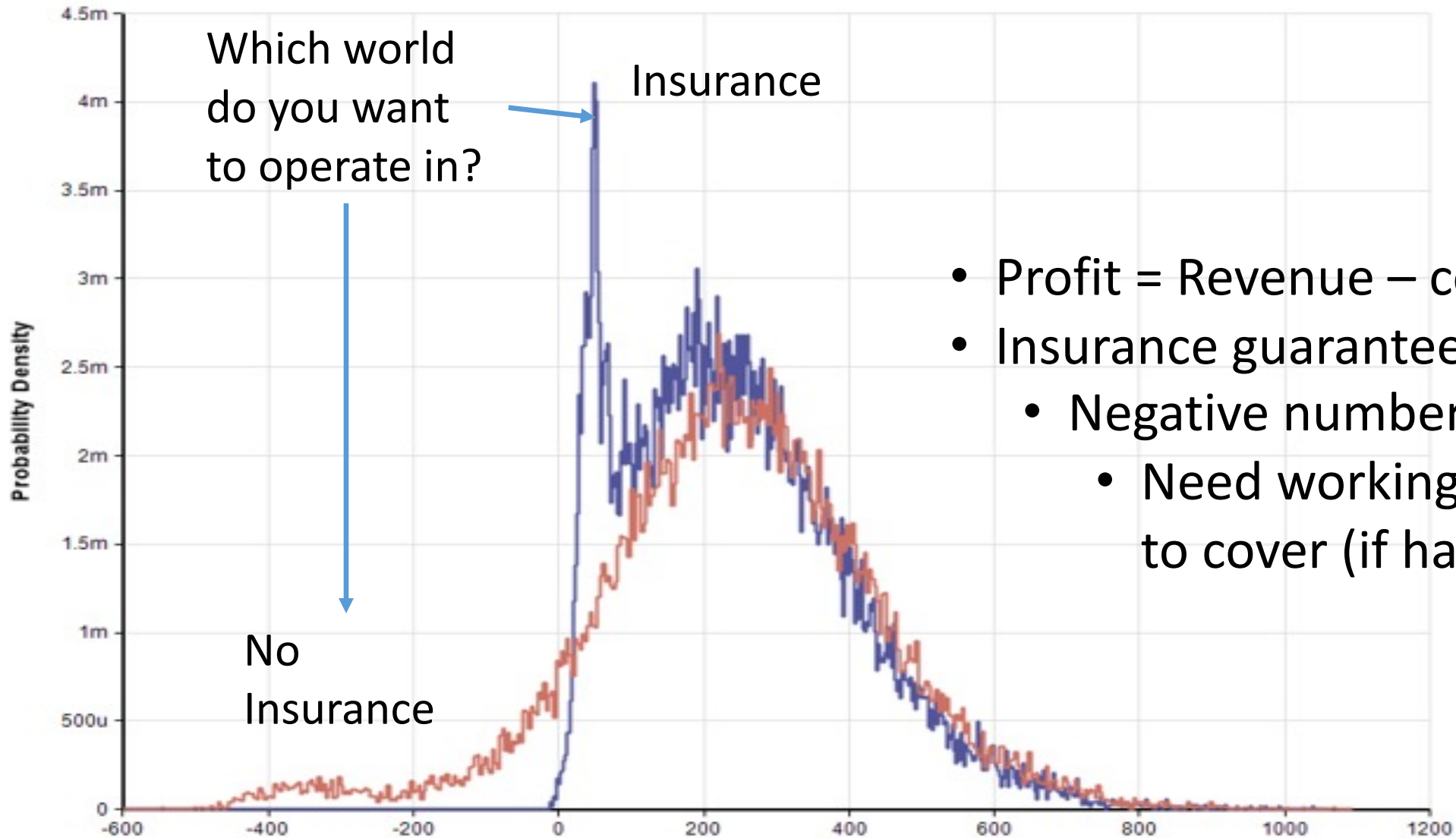
- Prices and volatility
 - Influence premiums by shaping the price distribution of fall prices
 - Influence farm decision making as farmers can strategically use insurance



Corn

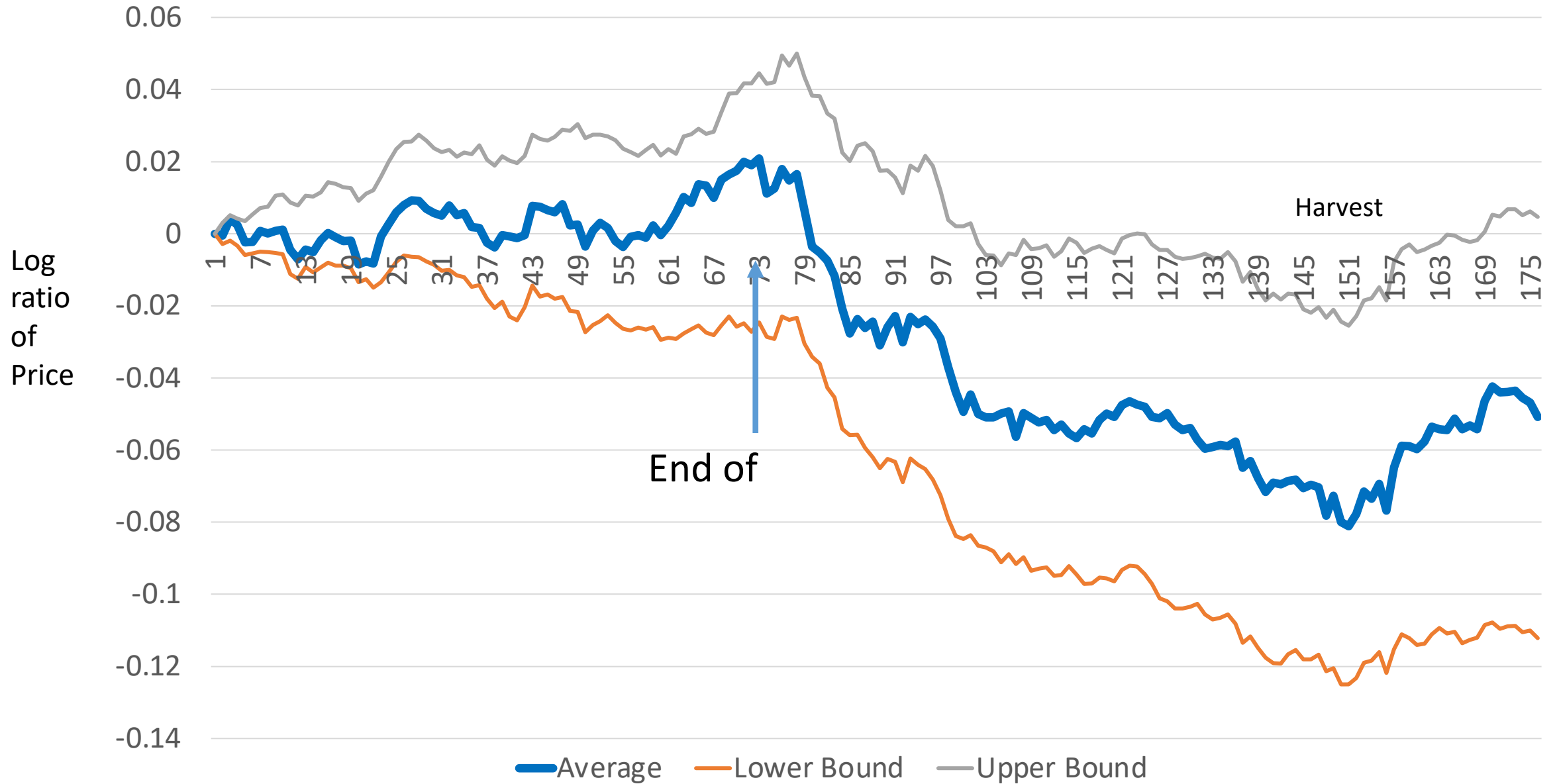


No Insurance vs. Insurance (80% RP), Colfax Co. NE., \$/acre

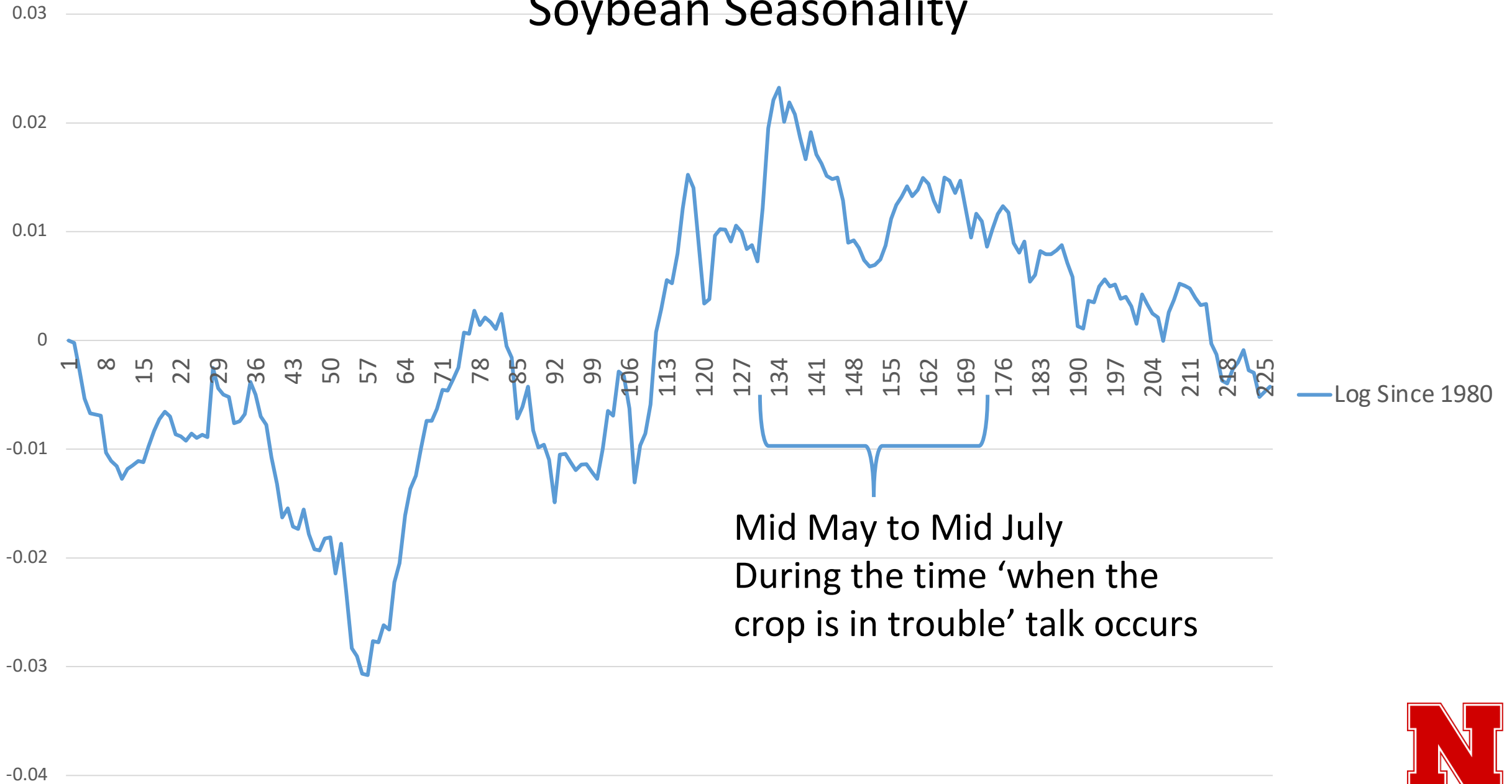


- Profit = Revenue – costs
- Insurance guarantee – costs
 - Negative number
 - Need working capital to cover (if happens)

Corn Futures Seasonality

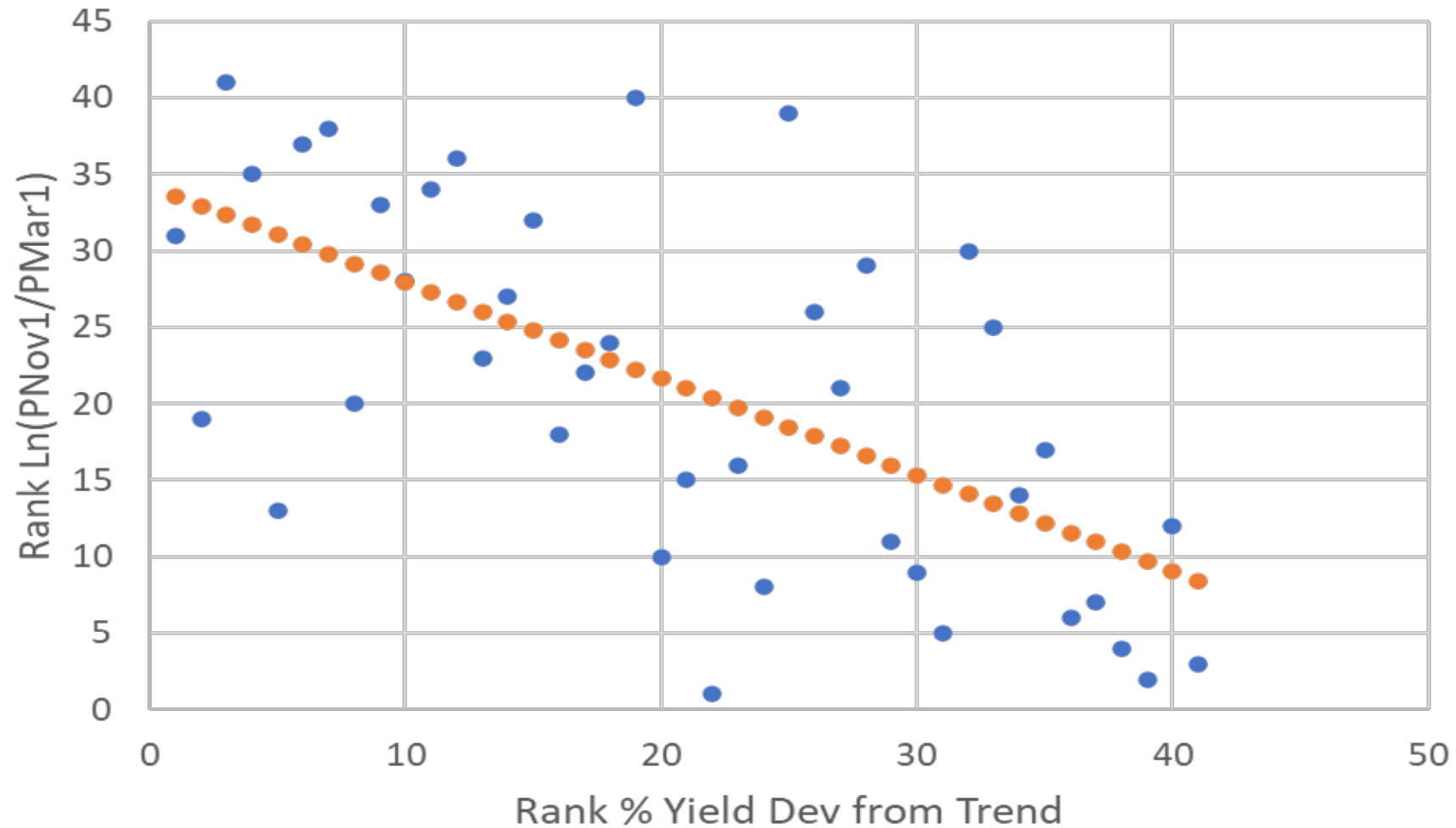


Soybean Seasonality



Forward looking and personal

Colfax Rank Correlation



Budget Prediction

- Right now, farmers and lenders want to predict most likely outcome this fall
 - Back of envelope = \$77/acre profit
 - Add in seasonal, profit drops to \$33/acre
 - Prices drift down in the long-run
 - Add in correlation and seasonal, profit drops to \$14/acre
- Back of the envelope (expected yield * fall price – costs) appears to overestimate profits

Discussion

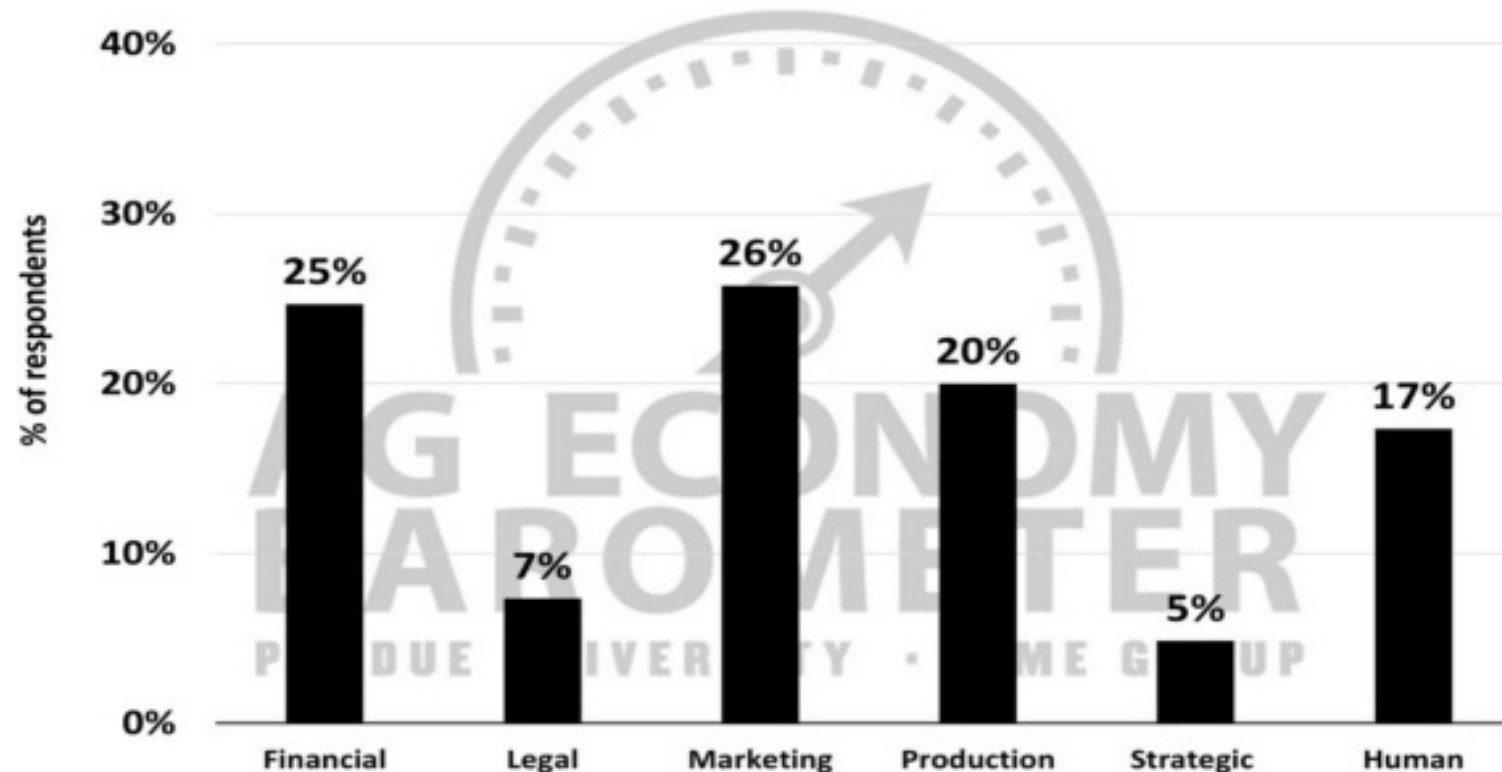
- Trade the market you are facing, not the one you want
- Insurance provides you a revenue floor
 - Use this information to your advantage
- Identify if your costs are higher/lower than this amount
 - Reflects your risk exposure
 - Can you handle this exposure?
- Expected income can be misleading and on the high side
- Focus on exposure. Keep small (limit production costs) and enjoy profits.

Types of Risk

- **Production** - Weather, climate change, pests, diseases, technology, and input quality.
- **Marketing** - Changes in supply and demand fundamentals, fluctuations in input and output prices.
- **Financial** - Cost and availability of capital, the ability to meet cash flow needs, and the ability to maintain and grow equity.
- **Legal** - Issues, production and marketing contracts, tort liability,
- **Human** - Resource management employee satisfaction and productivity related to competitive positioning and strategy.
- **Strategic** - Threats of farm's ability to meet its long-run strategy and objectives

Purdue Farmer Survey: Risk Threats

Figure 1: Which of the following risks would you say is most threatening to your organization?



Source: Purdue Center for Commercial Agriculture, Strategic Risk Survey, February 2023

Insurance types – Crop

- Private Products: Hail, Wind, Fire, Storage
- Federal Yield, Revenue
 - Indemnity Measured individual loss RP, YP,
 - Parametric Linked to reference index –county yield, futures, rainfall
 - MP, ECO, SCO, PRF, ARPI, Livestock – LRP, LGM, Dairy,
- Non-Reinsured Supplementals
 - Privately offered – AIP linked
 - Unsubsidized – Replant, XXX
- Self Insurance
 - Deductibles
 - Nominal vs. Effective spread

Phelps NE Level Analysis

	B	C	D	E	F	G	H	I	J	K	L
1				Phelps County NE IRR 230 APH							
2	Coverage Level			50%	55%	60%	65%	70%	75%	80%	85%
3	Guarantee - BU/Acre			115	126.5	138	149.5	161	172.5	184	195.5
4	Coverage - \$/Acre			\$535.90	\$589.49	\$643.08	\$696.67	\$750.26	\$803.85	\$857.44	\$911.03
5	Gross Premium - \$/Acre			\$4.12	\$5.84	\$8.78	\$13.02	\$18.70	\$27.10	\$37.70	\$52.60
6	Subsidy - \$/Acre			\$3.30	\$4.67	\$7.03	\$10.42	\$14.96	\$20.87	\$25.64	\$27.88
7	Net Premium - \$/Acre			\$0.82	\$1.17	\$1.76	\$2.61	\$3.74	\$6.23	\$12.06	\$24.72
8	5% protection up cost				\$0.35	\$0.59	\$0.85	\$1.13	\$2.49	\$5.83	\$12.66
9	Rate on line for	\$53.59						2.1%	4.6%	10.9%	23.6%
10	Acres			1000	1000	1000	1000	1000	1000	1000	1000
11	Price Election			\$4.66	\$4.66	\$4.66	\$4.66	\$4.66	\$4.66	\$4.66	\$4.66
12				11.5							
13				53.59							